



## P C L I

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Unusual growths on the eye and  
swollen lumps on the eyelid

**P**terygia and pingueculae are abnormal growths on the surface of the eye.

While a pinguecula does not interfere with sight, a pterygium may grow large enough to cause vision problems. Both conditions are most commonly seen in warm, dry climates. They are not cancers.

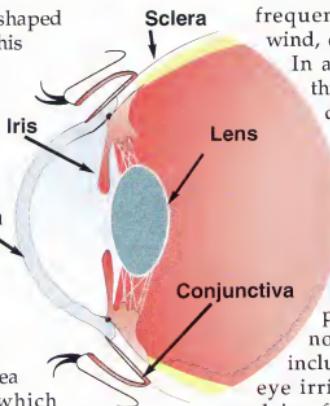
### **What is a pterygium?**

A pterygium is a fleshy, wedge shaped growth on the cornea of the eye. This elevated growth of elastic and connective tissue usually begins on the inner corner of the eye and extends toward the center of the eye. A pterygium is the result of an abnormal process in which the conjunctiva grows onto the cornea.

The conjunctiva is a thin transparent mucous membrane which lines the inner surface of the eyelids and covers the white portion of the eye (sclera). The cornea is the clear window of the eye which allows light to enter the eye. Because the cornea is transparent, what is seen when looking at the cornea is the underlying iris (colored part of the eye) and pupil. The conjunctiva normally extends from the inner eyelid margin across the sclera to the edge of the cornea. A pterygium occurs when the conjunctiva begins to grow onto the cornea.



*A pterygium is an abnormal growth on the cornea of the eye.*



### **What causes a pterygium?**

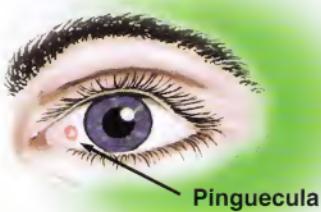
The exact reason pterygia occur is not completely understood. However, long term exposure to ultraviolet sunlight and chronic irritation from dry conditions seem to contribute to their development. Pterygia develop more often in people who spend a great deal of time outdoors and are frequently exposed to sun, wind, dust, or harsh climates. In addition, pterygia are three times more likely to develop in men than in women.

### **What are the symptoms of a pterygium?**

The symptoms of a pterygium are usually not severe but may include blurred vision and eye irritation. Patients often complain of itching, burning, and scratchiness. During periods of growth, the pterygium is swollen and red. Pterygia tend to progress slowly, and, in many patients, they stabilize without causing problems. However, if the pterygium grows over the center of the cornea, vision loss occurs.

## **How is a pterygium treated?**

Treatment of a pterygium is not necessary if it does not cause any noticeable symptoms. If the pterygium becomes red and irritated, eye drops or ointments are used to reduce inflammation and relieve dryness. If good vision is threatened, a pterygium can be surgically removed. Surgery can also be performed for cosmetic reasons. However, pterygia have a tendency to return, especially in younger people. In addition, the symptoms of dryness and irritation often persist after removal. Surface radiation or medications can be used to help prevent recurrences.



## **What is a pinguecula?**

A pinguecula is a thickening of the conjunctiva on either side of the eye. The conjunctiva is a thin layer of tissue covering the sclera or white part of the eye. A pinguecula, which appears as a yellowish or white lump, is composed of benign material, such as fat or degenerated

tissue. Unlike a pterygium, a pinguecula never grows onto the cornea and is separated from the cornea by normal tissue.

## **What causes a pinguecula?**

Much like pterygia, pingueculae are usually caused by dryness and exposure to the environment. Pingueculae occur more frequently in climates which are warm, dusty and dry. People who work or spend a great deal of time outdoors are more prone to this condition.

## **What are the symptoms of a pinguecula?**

In most people, a pinguecula creates no symptoms. However, burning or stinging of the eye may occur in some cases. Occasionally, a pinguecula may become reddened and irritated by smoke, dust, or wind. Although the eye may be unpleasant looking, a pinguecula does not interfere with sight.

## **How is a pinguecula treated?**

In most cases, treatment of a pinguecula is not necessary. If the pinguecula becomes inflamed, drops are used to clear redness and irritation. Although surgical removal is rarely required, a pinguecula may be removed for cosmetic reasons. However, as with a pterygium, the pinguecula frequently returns after removal.

## What is a chalazion?

A chalazion appears as a swollen area, (small lump) on the upper or lower eyelid and is caused by the obstruction of the orifice of a tarsal gland in the eyelid. Tarsal glands, located inside the layers of eyelid tissue, produce a lubricating tear film. Obstruction of the flow of tears from one of the glands results in retention of tear fluid inside the gland and swelling of the lid.

Usually painless, except for slight tenderness in the early stages, chalazia (plural) appear as small, soft lumps. Occasionally they grow to the size of a small fingernail and become rigid, (a chronic chalazion). In rare cases the chalazion may grow large enough to apply pressure on the eye and cause a blurring of vision.



## What causes a chalazion?

A chalazion is not caused by infection but can become a site for infection if left untreated. The exact cause is obscure, however chalazia are associated with seborrhea (dry flaky skin), dry eyes, chronic lid inflammation and acne.

## How is a chalazion treated?

After a few weeks most chalazia disappear without any treatment. Hot packs and drops may be helpful in the early stages, and in cases of a chronic



**Tarsal Glands**  
(produce the oily part of tears)

chalazion, it may be removed in a simple in-office procedure. After a local anesthetic is given, to avoid discomfort, a chronic chalazion is drained through the inside of the eyelid. There are no stitches, healing is rapid and painless and there is no scar.

## What is a sty?

A sty appears as a furuncle (pimple) on the margin of the eyelid around the root of an eyelash. Also called a hordeolum, it is an infection originating in the sebaceous (oil) gland of an eyelash.

## How is a sty treated?



The infection usually resolves itself after removal of the eyelash. In some cases hot compresses and antibiotic preparations are needed, and occasionally an incision and drainage is necessary.

## Prevention is the best medicine

The best form of treatment for pterygia and pingueculae is prevention. The eyes should be protected from excessive ultraviolet sunlight with proper sunglasses. Avoiding dry and dusty conditions may also help prevent the development of a pterygium or pinguecula.

If you are experiencing the symptoms of a pterygium, pinguecula, chalazion, sty other eye growth or another vision problem, you should obtain a complete eye examination.